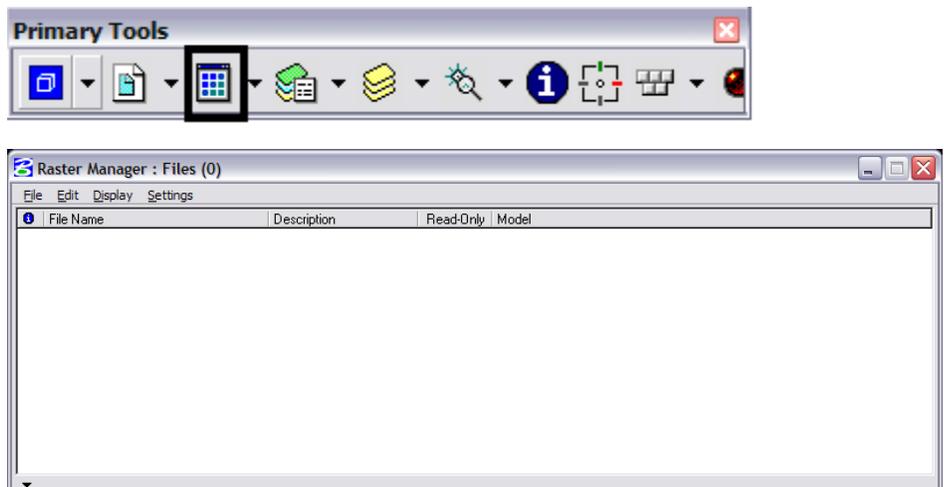


This document guides you through MicroStation Raster Management including Attaching Rasters, Clipping Rasters, Masking Rasters, and setting Raster Transparency. For additional settings on raster images including text clarity see *CDOT Printing Raster Images.pdf* under CDOT Workspace/CDOT Notes.

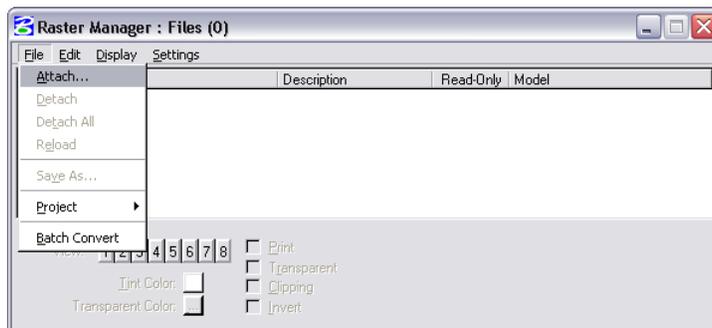
Raster Manager Dialog Box

The Raster Manager is used to display images as a reference to a DGN file. To access Raster Manager select **File > Raster Manager** or select the Raster Manager Icon from MicroStation's Primary Tool Bar.

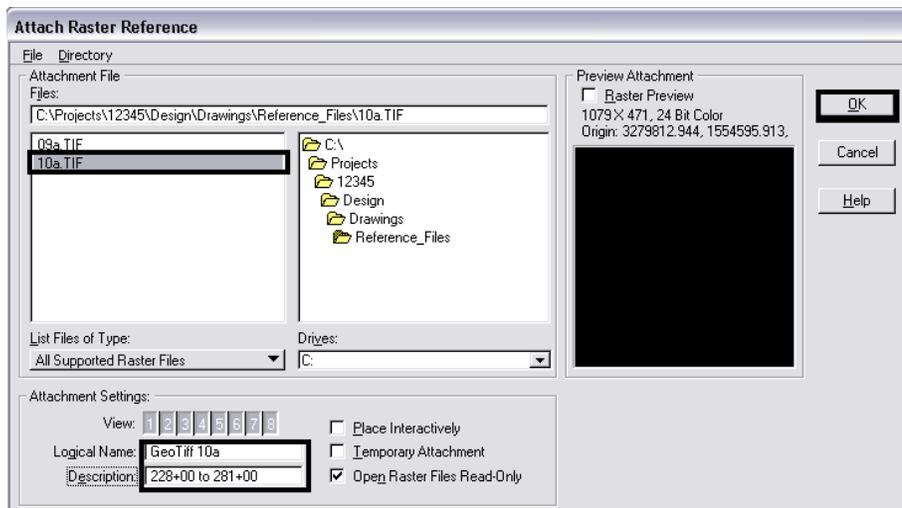


Attaching a Raster Image

1. Open Raster Manager and select **File > Attach** (This Workflow uses C:\Projects\12345\Design\Drawings\12345PlanProfile10.dgn as the master design file.)



2. Select the files to be attached, enter a *Logical Name* and *Description*, then select OK. A **Fit View** may be required to display the raster image.



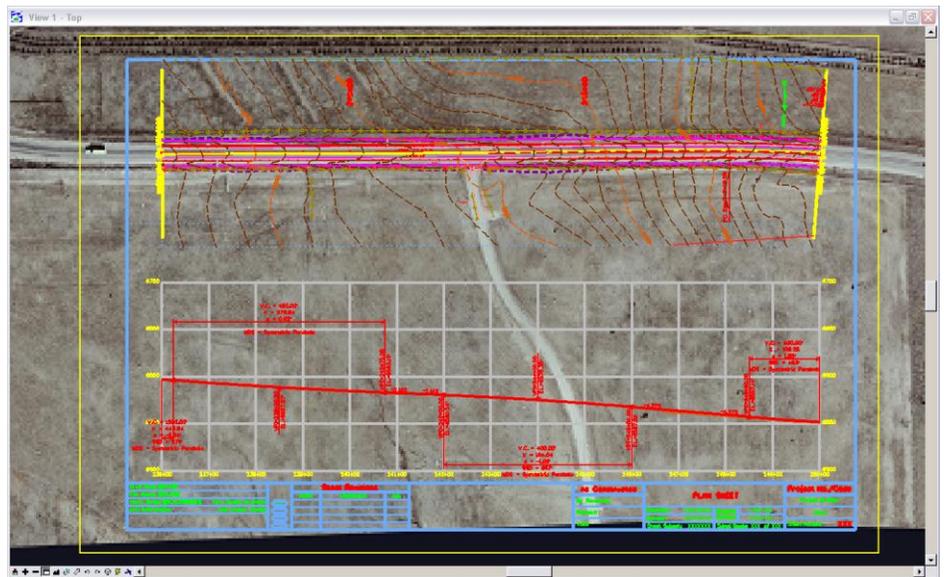
Note: Screen captured with white background for ease of viewing, to rid raster image of black borders see *Setting Raster Transparency* at the end of this document. Geo-Referenced Files typically will not need any modifying or relocating. These files have their coordinates and scaling embedded in an accompanying world file.

Clipping and Masking Raster Images

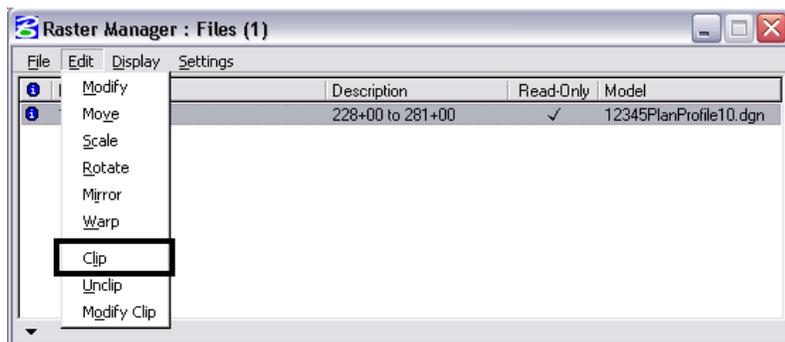
If for some reason there are portions of the raster image that you do not want to show you have two options: *Clip Raster* or *Mask Raster* which parallel the options available for references. *Clip Raster* crops the image's borders while *Masking Raster* is used for internal concealment of the raster image.

Clipping Raster Images

1. Window Area to show your area of interest.



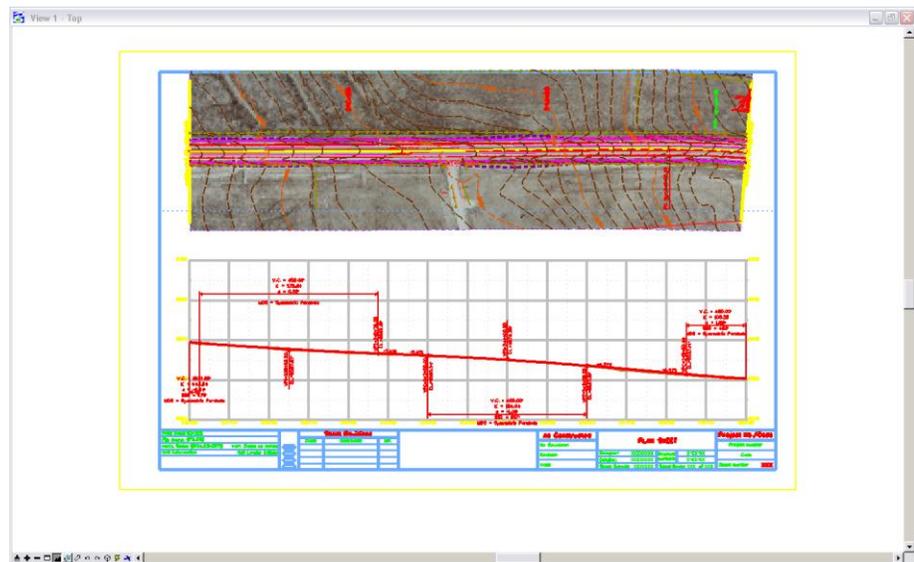
2. From Raster Manager's File Menu, select **Edit > Clip**.



3. A clipping dialog box presents Clipping options. Toggle to the appropriate mode.



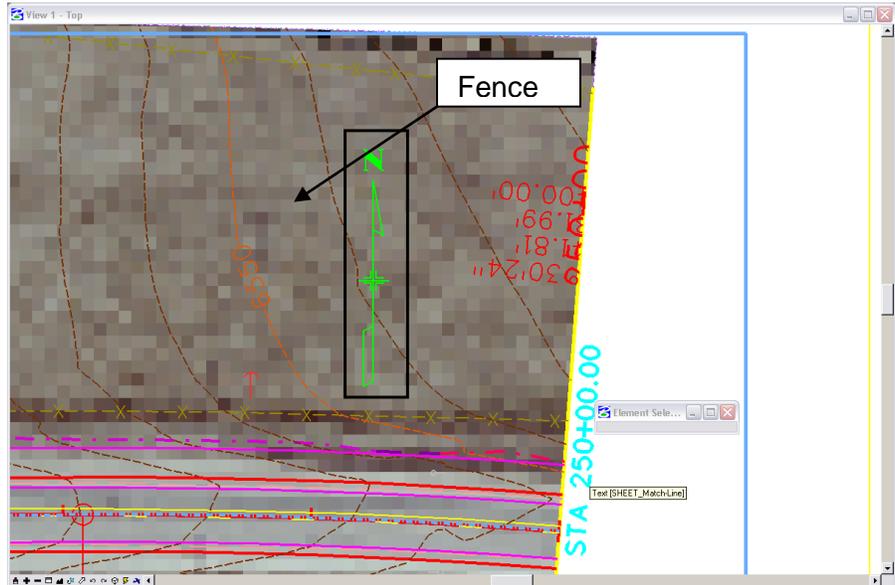
4. Select the element used to define the clip boundary (in this example, the same element used to clip DesignModel101.dgn reference). Enter a data point to accept element selection.



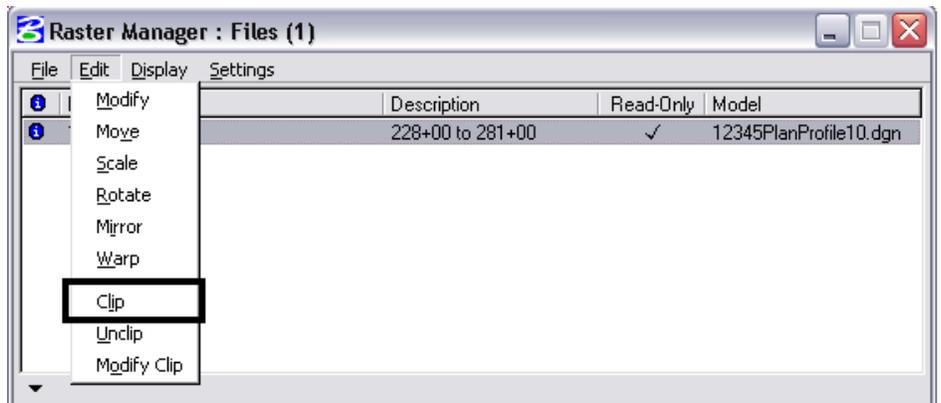
Note: Once defined, Clip Boundaries can be modified by selecting **Edit > Modify Clip** from the Raster Manager Menu. Clipping can be defined by the methods **Blocks**, **Elements**, and **Fences**.

Masking Raster Images

1. Place a fence or identify a block or element that defines the desired Raster Mask limits.



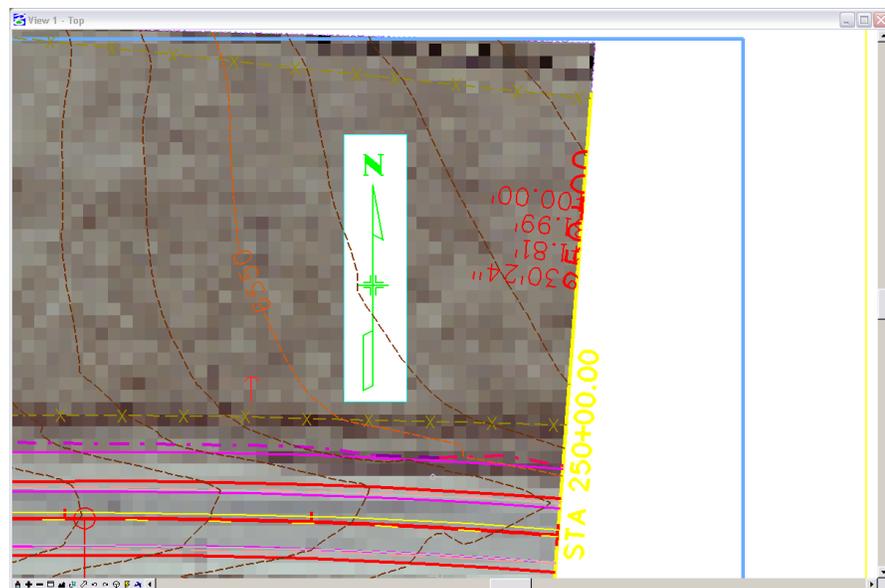
2. From Raster Manager's File Menu, select **Edit>Clip**.



3. Toggle to the appropriate Method and Mode.



4. Enter a data point inside the fence to complete the mask.

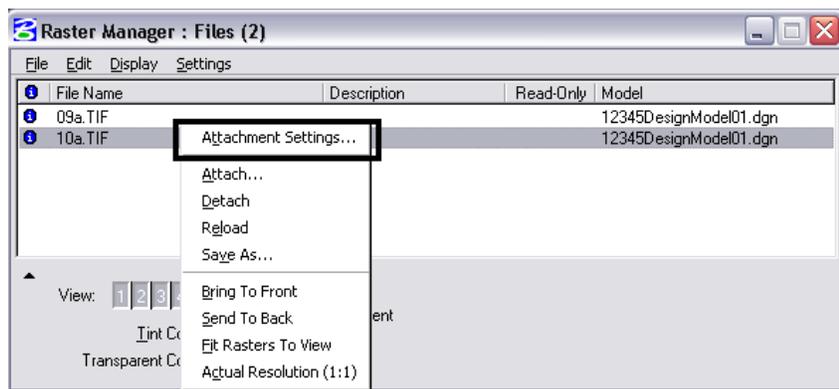


Setting Raster Transparency

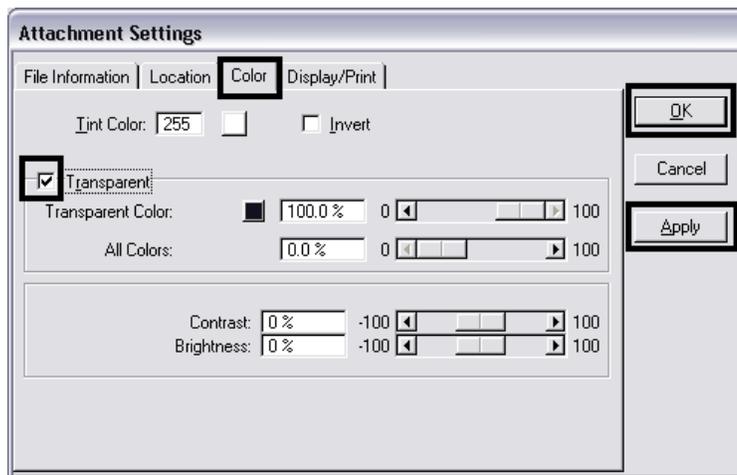
The dark, unused portion of your raster image (see black image outlines below) can be set to transparent allowing the user an easier alternative to clipping. This is extremely useful when printing raster images as this portion of the drawing is omitted. (This workflow uses C:\\Project12345\\Design\\Drawing\\Reference_Files\\12345DesignModel01.dgn)



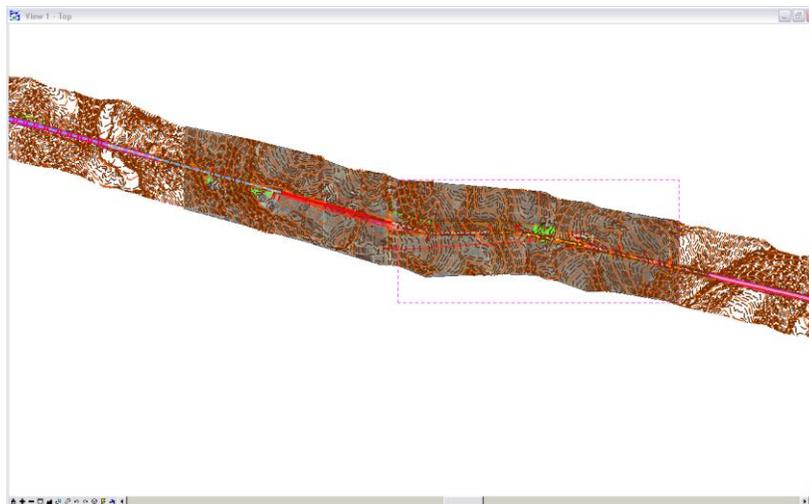
1. Open Raster Manager.
2. **Right click** on a raster attachment and select *Attachment Settings* from the flyout menu.



- From the **Color Tab** in the **Attachment Settings** Dialog Box, select the checkbox for **Transparent**, make sure the **Transparent Color** is at **100%**, select **Apply**, and then **OK**.



- Repeats step 2 and 3 for any additional attachments.



Note: Transparent color can be set to any color, but is black by default (Red:0, Blue:0, Green:0). Use additional graphics programs (i.e. Adobe Photoshop) to determine the RGB settings of your raster images.